

OHIO RAIL DEVELOPMENT COMMISSION

INTER-OFFICE COMMUNICATION

TO: James E. Seney, Executive Director

FROM: Susan J. Kirkland, Manager, Grade Crossing Safety Section

SUBJECT: Safety Section Progress Report

DATE: January 11, 2006

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The following major objectives were met by the Safety Section during the last two (2) months:

1. Congressional set-asides were established in the most recent Transportation Safety Bill titled SAFETEA-LU. Five (5) specific earmarks were related to grade crossing safety improvements in the State of Ohio. The ORDC Safety Section will administer these five (5) projects on behalf of the Ohio Department of Transportation (ODOT). The total amount of SAFETEA-LU funds is \$2,078,000. These funds are in addition to ORDC's standard allocation of \$15,000,000 per fiscal year. The attached spreadsheet outlines the five (5) set-asides and specific information for each project.
2. The Safety Section submitted the 2005 Highway Safety Improvement Program Report to the Federal Highway Administration (FHWA) on December 31, 2005. A copy of the report is attached for your review.
3. I will attend the National Committee on Uniform Traffic Controls Devices (NCUTCD) meeting in Washington, DC on January 17th - 20th, 2006.

In addition, FHWA has hired the Institute of Transportation Engineers (ITE) to re-write the Railroad-Highway Grade Crossing Handbook, Second Edition FHWA-TS-86-215 September 1986 (the Brown Book). The FHWA Office of Safety in Washington is spearheading this effort. I have been nominated to an advisory committee for the development of this new handbook. The first official meeting of the advisory committee will be held on conjunction with the NCUTCD winter meeting on January 17-20, 2006. I consider this task to be of great importance to the future of grade crossing safety in the United States.

Finally, while I am in Washington, I hope to meet with Kevin King of Senator DeWine's staff. I plan to discuss with Mr. King the \$500,000 set-aside from the last Transportation Bill designated for enhancements to crossings on an Ohio high speed designated corridor.

4. Two (2) members of the ORDC Safety Section have been served with a notice of deposition to take place on January 31, 2006. Mike Forte' and I will be deposed on a corridor project completed several years ago in the City of Canton. The depositions are related to Barbara P. Derheimer, etc. v. Norfolk Southern Railway Corporation, Stark County Court of Common Pleas, Case No. 2005 CV 01129. Mr. Alan Klodell will attend both depositions.

5. The Federal Railroad Administration (FRA) has announced they intend to conduct a series of on-site reviews in Ohio the week of January 23rd, 2006. The reviews will take place at crossings that experienced fatal crashes in calendar year 2005. The ORDC Safety Section will accompany the FRA during this review process and take part in a wrap-up meeting on January 26th, 2006. The attached spreadsheet shows the fatal crash locations for 2005 and explains what action the ORDC Safety Section has taken at the crash locations thus far. Two (2) crossings lack information in the "status" column as I am awaiting reports from my staff.
6. Safety Section staff attended the Ohio Supreme Court oral arguments on January 11, 2006. The session related to the City of Reading's case before the Ohio Supreme Court concerning the Public Utilities Commission of Ohio's (PUCO) authority to force a local highway authority to close a railroad crossing. The City of Reading argued that Section 4907.474 of the Ohio Revised Code (ORC) granting PUCO this authority is unconstitutional due to the local highway authority's home rule status.

SJK:sja

Attachments (3)

SAFETEA-LU High Priority Projects

Administered By: Ohio Rail Development Commission

Project Numbers	Location	Description As Written In SAFETEA-LU	Description As Researched By ORDC	\$ Amount In SAFETEA-LU	Estimated Amount by ORDC
SAFETEA-LU# 347 PID #80512	LIC C&ORR 151819U	Highway grade crossing improvement on Summit Road at Pataskala, Ohio	Congressman Tiberi secured funds for the surface reconstruction of Summit Rd. (CR 26-0.52)	\$ 54,400	\$100,000
SAFETEA-LU# 1644 PID #80532	CUY (Berea) NS 523940J	Upgrade circuitry on vehicle protection device at Sheldon Road rail crossing in Berea	Congressman Kucinich secured funds on NS's behalf for circuitry upgrade.	\$ 112,000	\$178,940 (NS 2004)
SAFETEA-LU# 2302	LAK (Madison) NS & CSX 472017F & 523829E 472015S & 523830Y 472018M (Joint Xing)	Construct highway-rail crossing safety upgrades at 3 grade crossings in Madison Village, Ohio	Congressman LaTourette secured funds for a QZ in Madison Village. Community wants to address three crossings with triple track NS & CSX mains.	\$ 240,000 (\$350,000) Combined	\$430,000
SAFETEA-LU# 3083 PID #'s 80533, 80534 80535, 80536 80537, 80538	LOR (N. Ridgeville & Elyria) NS 523844G, 523845N, 523847C, 523848J, 523851S, 523861X	Upgrade grade crossing safety devices in Elyria and North Ridgeville	Congressman Sherrod Brown secured funds on NS's behalf for six (6) circuitry upgrades on the Chicago line.	\$ 761,600	\$1,219,210 (NS 2004)
SAFETEA-LU# 4657	LAK (Madison) NS & CSX 472017F & 523829E 472015S & 523830Y 472018M (Joint Xing)	Highway rail crossing safety upgrades at three locations in Madison Village, Ohio	Senator DeWine secured funds for a QZ in Madison Village. Committee wants to address three crossings with triple track.	\$ 110,000 (\$350,000) Combined	\$430,000
			Total	\$2,078,000	

2005 HIGHWAY SAFETY IMPROVEMENT PROGRAM REPORT
(evaluation of improvements made in State Fiscal Year FY 2002)
OHIO RAIL DEVELOPMENT COMMISSION
RAILROAD GRADE CROSSING SAFETY PROGRAMS

Purpose: The Ohio Rail Development Commission (ORDC) Railroad Grade Crossing Safety Programs provide funding for highway-railroad grade crossing safety improvements or corrective activity designed to alleviate a highway-railroad hazard.

Effectiveness: The crashes occurring at public grade crossings in Ohio have shown a steady decline since the early 1970s. The table below summarizes the progression. The State continues to experience a leveling off, with an alarming 55% of all crashes occurring at locations with active warning devices.

	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005*</u> (Calendar year)
<u>CRASHES</u>	137	127	143	123	120	112	117	88
<u>FATALITIES</u>	14	19	15	21	20	11	13	5
<u>INJURIES</u>	42	46	40	41	36	44	32	23

*2005 data includes statistics from January – September, 2005

Funding: The ORDC Railroad Grade Crossing Safety Programs are funded through the Ohio Department of Transportation (ODOT) from the Federal Highway Administration (FHWA) Hazard Elimination Funds and Surface Transportation Program. Historically, ORDC has received \$15 million per fiscal year. This amount exceeds the \$6.3 million set-aside for railroad grade crossing safety in the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) by \$8.7 million. For FY 2002, the total expenditures in the grade crossing safety programs were \$16,738,192.

In addition to the detailed analysis for FY 2002, the ORDC has attached a Summary of FY 2005 Activities.

Fiscal Year 2002 Activities

CROSSING APPROACH IMPROVEMENTS

Activities such as channelization, new or upgraded traffic signals and pre-signals guardrails and pedestrian / bicycle path improvements near the crossing are funded as part of warning device projects. These types of improvements are not specifically funded as individual projects using Federal funds administered by the ORDC. In addition, the State of Ohio funds grade crossing illumination projects through a State funded Supplemental Assistance Program administered by the Public Utilities Commission of Ohio (PUCO).

CROSSING WARNING SIGN AND PAVEMENT MARKING IMPROVEMENTS

No specific improvements were accomplished in the area of crossing warning sign and pavement marking improvements in Fiscal Year 2002 due to the fact that advance warning signs, crossbucks and pavement markings were upgraded in 1994 at all passively- warned highway grade crossings as part of the Manual on Uniform Traffic Control Devices (MUTCD) experiment for the evaluation of the Buckeye Crossbuck.

ACTIVE GRADE CROSSING EQUIPMENT INSTALLATION / UPGRADE

Priority Warning Device Improvements (Original Section 130 Program)

In FY 2002, 18 crossings were specifically identified by the Federal Railroad Administration (FRA) Hazard Index. The locations were selected on a state-wide basis. Based on the Diagnostic Reviews that were conducted, 19 actual flashing lights and roadway gate installations were completed under this program. The increase in projects installed versus projects identified is due to the close proximity of another crossing to the original location identified by formula. The attached spreadsheet provides before and after crash evaluation for these 19 locations. This data is representative of a sample of the safety improvements funded in the ORDC's overall program. The total number of crossings funded in this manner is significantly less than prior fiscal years due to nearly \$2 million dollars in change orders processed for projects funded in past fiscal years. To rectify this, the ORDC has re-evaluated the average cost of a warning device project and currently encumbers a more accurate dollar figure upon the initial selection of the project.

The FRA Hazard Index considers multiple factors in the ranking system. In FY 2002, some of the 18 prioritized locations did not encounter crashes within the three (3) year pre-project time frame. This occurrence is likely due to a combination of high or severe qualities other than crash data, for example train volume and speed, vehicular count, angle of the crossing, number of tracks and existing warning devices.

The column titled FRA ranking on the attached spreadsheet indicates the statewide ranking of the crossing at the time it was selected for improvement. The ranking demonstrates a 1 to 6,100 position of that specific location in comparison to all public at grade crossings in Ohio. In this particular fiscal year, the project locations are ranked between 1 and 199. Locations between 1 and 199 that were not selected already are equipped with flashing lights and roadway gates or it is an existing project identified prior to this set of projects.

Rail Corridor Program

In an effort to take advantage of economies of scale, the State of Ohio promotes the concept of upgrading segments of rail, with multiple crossings, at one time. In FY 2002, several relatively small corridors were addressed.

A CSX Transportation corridor was addressed from Greenwich, Ohio in Wayne County east to the Pennsylvania State line. A total of 19 crossings were addressed with the application of flashing lights and roadway gates. This corridor was a continuation of the original CSX Corridor Improvement Project from Greenwich, Ohio in Wayne County west to the Indiana State line identified as part of the Conrail merger in 1999.

A Norfolk Southern diagonal corridor across the northwest tip of Ohio was addressed. A total of 15 crossings in Fulton and Williams Counties were addressed with the application of flashing lights and roadway gates.

A small corridor on a State of Ohio-owned shortline was addressed in FY 2002. Three (3) crossings in Harrison County on the Columbus and Ohio River Railroad-Georgetown Branch were addressed with the application of flashing lights and roadway gates.

Fatal Crash Upgrade Program

The Fatal Crash Upgrade Program was a new program initiated by the ORDC in 2001. When a community in Ohio experiences a fatal grade crossing crash, the ORDC immediately conducts a field review of the crossing. If the field review ultimately concludes that an engineering improvement would reduce the chance of another crash, the ORDC immediately addresses the engineering issue with a project to implement the corrective action. In FY 2002, the ORDC funded eight (8) installations of flashing lights and roadway gates as a result of this program.

Grade Crossing Consolidation Program

In the Grade Crossing Consolidation Program, flexible funds providing local incentive for crossing closure are utilized. The ORDC offers a range of improvements, for example, flashing lights and roadway gates, surface reconstruction, profile improvement, and/or railroad infrastructure improvements that can benefit the highway user and/or the creation of parallel roadways and cul-de-sacs.

Over the years, crossing closures have become increasingly difficult to achieve. In 2002, the ORDC closed five (5) crossings. In exchange for these closures two (2) flashing lights and roadway gate installations and five (5) grade crossing surface reconstruction projects were performed.

County Task Force Program

The ORDC considers local level grass root interests in grade crossing safety a critical component of its overall program. The ORDC has assisted in the creation of approximately one dozen County Railroad Safety Task Force organizations throughout the State. In these Task Force groups, ORDC's efforts are often complemented by the work of such rail highway grade crossing safety advocacy groups as the "Angels on Track Foundation." ORDC staff is active members on each of the Task Force groups and attempts to partner with the local groups to fund safety projects that they prioritize. In 2002, the ORDC funded several projects. One (1) project was in conjunction with the Stark County Railroad Safety Task Force. In this case, two (2) Townships Roads in Nimishillen and Atwater Townships were improved by the installation of flashing lights and roadway gates at two (2) crossings.

A second project in Van Wert County and involved the ORDC funding a flashing lights with roadway gates installation at CR 5. Simultaneously, the Van Wert County Engineer and CSX Transportation funded a profile improvement and rail-seal type crossing surface project at the CR 5 crossing.

The ORDC teamed with the Clark County Railroad Safety Task Force to administer Federal funds on their behalf. The funds were used as a local match for three (3) flashing lights and roadway gate installations. The PUCO, Norfolk Southern and the Clark County Task Force funded the three (3) improvements on Township Roads 92, 98 and 101.

State Route System Crossing Improvement Program

The ORDC desires to eliminate crossings on Ohio's State Route system that are equipped with passive signage and/or flashing light systems. In Fiscal Year 2002, the ORDC funded two (2) upgrades from passive signage to flashing lights with roadway gates on Ohio's State System. The improvements were made at: Carroll County, SR 183-6.28 and Sandusky County, SR 635-3.95.

VISIBILITY IMPROVEMENTS

Visibility improvements are not currently funded as individual projects using Federal funds. Activities such as sight distance improvements and vegetation clearance are funded through the PUCO's state funded Supplemental Assistance Program.

ROADWAY GEOMETRY IMPROVEMENTS

Surface Reconstruction Program

The ORDC funds the installation of high-type surface material at grade crossings. The Surface Reconstruction Program primarily addresses crossings on the State Route system and is funded by a labor/material split with the operating railroad. The ORDC funds the material costs and the railroad funds the labor portion of the project. In 2002, the ORDC funded 39 projects.

Profile Improvement

Activities such as sight distance improvement and elimination of high-profile ("humped") crossings near are funded as part of the Supplemental Assistance Program through the PUCO.

GRADE CROSSING ELIMINATION

Grade Crossing Consolidation Program

In the Grade Crossing Consolidation Program, flexible funds providing local incentive for crossing closures are utilized. The ORDC offers a range of incentives, for example, flashing light with roadway gates installation, surface reconstruction, profile improvement, railroad infrastructure improvements that can benefit the highway user, the creation of parallel roadways and cul-de-sacs.

In 1999, the State of Ohio began the Rail Grade Separation Program developed under the direction of Governor Taft. This program is a 10-year, \$200 million program led by Ohio Department of Transportation (ODOT) and the Ohio Rail Development Commission (ORDC). Annually, the ORDC commits \$2 million to this program. The program will address safety, mobility and economic development concerns from Ohio's local communities and elected leaders. The program is intended to address a minimum of 30 crossings during its 10 year duration. Detailed information on this program can be found at <http://www.dot.state.oh.us/rgsp/>.

Specifically, in 2002, the ORDC closed five (5) crossings. In exchange for these closures two (2) flashing light and roadway gates installations and five (5) grade crossing surface reconstruction projects were performed. The table below summarizes the past and post three (3) Fiscal Year's closures.

FISCAL YEAR	Number of Closures
1999	24
2000	5
2001	28
2002	5
2003	6
2004	6
2005	3
Total	77

GRADE CROSSING INVENTORY UPDATE:

In FY 1999, the ORDC funded the creation of a State of Ohio Grade Crossing Inventory Database. This online tool allows anyone with Internet access to view photographs of the actual crossings as well as query relevant data about the crossing. The PUCO is charged by the Ohio Revised Code (ORC) to maintain the Grade Crossing Inventory for the State of Ohio.

The data is updated to reflect warning devices improvements and/or modifications made by the State of Ohio. To ensure this, the ORDC requires that photographs are taken at the final inspection of each Federally funded project and ORDC staff enters these photographs along with updated information about the warning devices into the database.

Summary of Fiscal Year 2005 Activities

The following table outlines the funds expended in Fiscal Year 2005. This data will be fully reported on in the Highway Safety Improvement Program Report submitted in June, 2009.

Category	Number of Crossings	Cost
Crossing Approach Improvements	0	0
Crossing Warning Sign and Pavement Marking Improvements	0	0
Active Grade Crossing Equipment Installation / Upgrade	71 (25 crossings funded by hazard index, 11 by corridor process, 6 by fatal crash upgrade and 29 by County Task Force and Special Projects)	\$10,874,203.85
Visibility Improvements	0	0
Roadway Geometry Improvements	25	\$1,938,044.63
Grade Crossing Elimination	5	\$2,363,213 (\$2,000,000 for the Grade Separation Program, \$363,213 for 3 crossing closures)
Grade Crossing Inventory Update	See previous discussion on this topic.	

Total \$15,175,461.48

FY 2002 - Projects Funded Under 23 USC 130

[illegible]

FY 2002 - Projects Funded Under 23 USC 130

Federal Funding Level in FY 2002 = \$16,738,192 106 Flashing Lights with Roadway Gate Installations, 5 Crossings Closed, 39 Surface Reconstruction Projects						HAZARD PREDICTION RANKING (1/6,100)		CRASH DATA BEFORE												CRASH DATA AFTER											
								1999				2000				2001				2002				2003				2004			
C O U N T Y	ROUTE	RRCO	DOT #	DATE OF FHWA 1240	TOTAL PROJECT COST	Before	After**	F A T A L	I N J U R Y	P D O	F A T A L	I N J U R Y	P D O	F A T A L	I N J U R Y	P D O	F A T A L	I N J U R Y	P D O	F A T A L	I N J U R Y	P D O	F A T A L	I N J U R Y	P D O	F A T A L	I N J U R Y	P D O			
CRA	TR 24, Albaugh Road	NS	481590A	11/5/2002	\$114,792.06	12	217									2															
MED	CR 24, Columbia Road	CSX	142497J	4/18/2003	\$125,669.36	37	671									1															
MED	CR 35, Friendsville Rd.	W&LE	473548F	11/22/2002	\$133,222.27	35	3,420		1	1						2															
MIA	CR 16, Peterson Rd.	CSX	155204R	4/22/2002	\$172,874.04	25	272																								
			Total		\$2,604,533.96																										
PDO - Property Damage Only																															
**Ranking/After - Takes into consideration all crash data available at time of calculation.																															
After Rank Date 5/26/2005																															
19 divided by \$2,604,533.96 = \$137,080.74 Average Project Cost																															

Ohio 2005 Fatal Crashes							
County	Local Hwy Authority	Route	RRCO	AAR #	Crash Date	Warning Devices	ORDC Investigation Findings and Status
Ashtabula	Village of Geneva	CR 9 Myers Rd.	CSX	523887A	3/28/2005	Flashing Lights with Roadway Gates	Crash found to be suicide. ORDC evaluation revealed warning devices equipped with CWT circuitry. ORDC found warning devices adequate.
Williams	Village of Alvordton	TR 106	NS	477482W	3/30/2005	Flashing Lights with Roadway Gates	
Crawford	City of Galion	SR 19-2.50 Harding Way East	CSX	518430V	4/13/2005	Flashing Lights with Roadway Gates	
Ashtabula	Ashtabula County	State Rd.	CSX	523898M	6/29/2005	Flashing Lights with Roadway Gates	Crash found to be suicide. ORDC evaluation revealed PMD-2 circuitry. ORDC evaluating potential circuitry upgrade.
Allen	Allen County	CR 50 Defiance Trail	CFW&E	523738X	6/2/2005	Buckeye Crossbucks	Diagnostic team coordinated by ORDC evaluated the crossing following the crash. Diagnostic team found existing warning devices adequate.
Wood	Wood County	CR 15 Pemberville Rd.	NS	509422E	6/30/2005	Flashing Lights with Roadway Gates	This fatal incident involved a pedestrian. Crossing being evaluated for upgrade in warning device circuitry. Diagnostic review schedule for February, 2006
Lake	City of Willoughby	Erie St.	CSX	523793Y	11/26/2005	Flashing Lights with Roadway Gates	Crossing evaluated following crash. Warning devices were upgraded to CWT in 1996. ORDC investigation revealed that power pole blocking warning devices in SE quadrant could be relocated.
Summitt	City of Cuyahoga Falls	Broad Blvd.	CSX	142007P	12/13/2005	Flashing Lights with Roadway Gates	This fatal incident involved a pedestrian. ORDC conducting detailed analysis of extensive crash history at crossing. ORDC intends to consider additional safety measures for crossing.
Perry	Perry County	CR 21 Cornstill Rd.	NS	513460V	12/21/2005	Buckeye Crossbucks	Crossing evaluated by ORDC immediately following crash. Diagnostic review schedule for February, 2006.

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